

Popular Prediction with Information and Features

¹P. Preeti, ²A. Adnan, ³S. Shreyash, ⁴S. Akshata, ⁵P. Namrata

AUTHORS PROFILE

Mrs.Preeti Patil, Dept. of Information Technology, D. Y. Patil College of Engineering, Pune.

Adnan Ahmed, B.E. D. Y. Patil College of Engineering, Pune

Shreyash Sherekar, B.E. D. Y. Patil College of Engineering, Pune.

Akshata Sonje, B.E. D. Y. Patil College of Engineering, Pune.

Namrata Padgilwar, B.E. D. Y. Patil College of Engineering, Pune.

Abstract

Social media platforms have democratized the process of web content creation allowing mere consumers to become creators and distributors of content. But this has also contributed to an explosive growth of information and has intensified the online competition for user's attention, since only a small number of items become popular while the rest remain unknown. Understanding what makes one item more popular than another, observing its popularity dynamics, and being able to predict its popularity has thus attracted a lot of interest in the past few years. In this work, we are predicting popular places which are worth visiting, and unpopular places with their comments using machine learning algorithms, we have also integrated google maps to find nearby places, coffee shops, ATMs, malls etc. Predicting the popularity of web content is useful in many areas such as network dimensioning, online marketing or real-world outcome prediction.

Keywords: Social media platforms, popularity dynamics, machine learning algorithms, popularity of web content.

1. INTRODUCTION:

The importance of tourism in the world helps the tourists to get used to the culture, customs, and conventions, language, and mode of living of the people at the destination. The advantages of tourism include job creation, foreign currency earnings, infrastructure development, poverty eradication, inequality reduction, and balanced regional development. In addition, tourism is important for creating world peace. Machine Learning is leading to technological innovation in all fields, with a great impact on the tourism sector. There is no difficulty in change diametrically the forms of commercialization and the way the travel industry works. In the last, tourism forecasting has attracted the study of various researchers mainly due to the importance of tourism in national economies. Using the time-series and regression methods have mostly dominated forecasting models of the current research approaches. Although these traditional techniques have proved some success in tourists forecasting new methods such as machine learning methods can very contribute to this area.

Actually, Machine learning methods have been successfully applied to many forecasting application including tourism forecasting . In this section related literature in the tourism area and machine learning. In this section theory of Machine learning especially for prediction. In this section applications machine learning in tourism. In section V Comparison of Machine Learning Algorithms in Tourist Prediction and conclusion.

2. ARCHITECTURE

A model simulation for trip planning recommendation system in Tourism with valuable information in textual and vocal format. Our Solution is to solve pain points of tourists coming to India like - voice forums to crowd source destination reviews, GPS based voice navigators to guide tourists at historical places and recommendations on seasons to visit and many other features.

3. PROPOSED SYSTEM

Travel itinerary recommendation is an important but challenging problem, due to the need to recommend captivating Places-of-Interest (POI) and construct these POIs as a connected itinerary and to personalize these recommended itineraries based on tourist interests and their preferences for starting/ending POIs and time/distance budgets.

Their work aims to address these challenges by proposing algorithms to recommend personalized travel itineraries for both individuals and groups of tourists, based on their interest preferences.

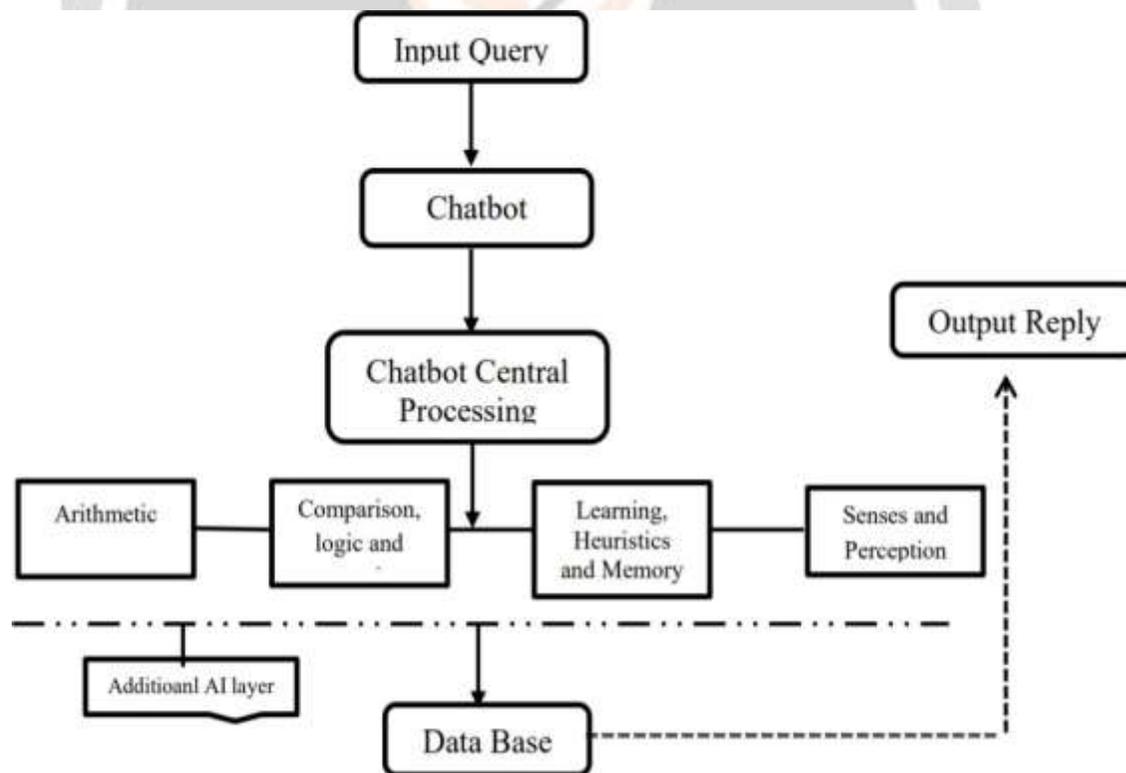


Figure 1. Proposed System

To determine these interests, They first construct tourists' past POI visits based on their geo-tagged photos and then build a model of user interests based on their time spent visiting each POI. Experimental evaluation on a Flickr dataset of multiple cities show that our proposed algorithms out-perform various baselines in terms of recall, precision, F1-score and other heuristics-based metrics

4. METHODOLOGY

1: Requirement

- Define problem statement.
- Identify the scope.
- Identify the user requirement and system requirement
- Identify feasibility problem

2: Information Gathering

- Gather information regarding to the user requirement
- Gather information regarding to the system requirement

3: Design

- Identification of the key objects, functional relation and other dependencies
- Functional dependency graph and UML diagrams.

4: Implementation

- Implementation of algorithms
- Implementation of NLP techniques
- Implementation of searching techniques

5: Testing

- Unit Testing
- Integration Testing

5. CONCLUSION

The system is intended to be used for the tourism domain to handle the user responses via a textual/speech user interface.

System which improve accuracy of prediction and recommendation.
Address problem of Data Sparsity and cold start problem

6. REFERENCES

[1] Yang Yang, Yaqian Duan, Xinze Wang, Zi Huang, Ning Xie, and Heng Tao Shen, "Hierarchical Multi-Clue Modelling for POI Popularity Prediction with Heterogeneous Tourist Information" IEEE2018OI10.1109/TKDE.2018.2842190

[2] Alireza Zohourian, Hedieh Sajedi, Arefeh Yavary, Department of Mathematics, Statistics and Computer Science, College of Science University of Tehr "Popularity Prediction of Images and Videos on Instagram" an IEEE 2018

[3] Yuxia Huang And Ling Bian “Using Ontologies and Formal Concept Analysis to Integrate Heterogeneous Tourism Information “IEEE 2015 DOI :10.1109/TETC.2015.2417111

[4] Ce Cheng, Jiajin Huang, and Ning Zhong ” Point-of-Interest Recommendations by Unifying Multiple Correlations “Springer 2016 DOI : 10.1007/978-3-319-39937-9_14

[5]Mao Ye, Peifeng Yin, Wang-Chien Lee, and Dik-Lun Lee ”Exploiting Geographical Influence for Collaborative Point-of-Interest Recommendation” : ACM 2011 DOI: 10.1145/2009916.2009962

[6] Chenyi Zhang · Ke Wang “POI recommendation through cross-region collaborative filtering” Springer 2015 DOI : 10.1007/s10115-015-0825-8

[7] Junmei Ding, Yan Chen¹, Xin Li, Guiquan Liu, Aili Shen, Xiangfu Meng “Unsupervised Expert Finding in Social Network for Personalized Recommendation” Springer 2016 doi.org/10.1007/978-3- 319-39937-9_20.

